REMARKS

Reconsideration and allowance of this application are respectfully requested.

Claim Status

Claims 1-7, 9, and 11 are pending in the application. Claims 8 and 10 are withdrawn from consideration in view of the Restriction Requirement.

Claim Amendments

Independent claims 1 and 7, along with their respective dependent claims, have been re-drafted as "new use for old product"-type claims.

Support for "controlling transmittance of light as a function of the intensity of light (saturable absorption function)" is found in the specification (referring to the published application) at Paragraph 42, last sentence.

The subject matter of the claims has not changed, protection is still sought for the 'saturable absorber being a film comprising a mixture of a carbon nanotube, a nonionic surfactant and/or a polyvinylpyrrolidone (PVP), and polyimide.' Only the claim style is changed so that the preamble limitation

must be considered. Therefore, it would be improper to make the next action final, as the amendments have not necessitated a new search nor raised new issues. 'Saturable absorber' was in the previous claims and should have been considered already. See MPEP 2143.03 - "**All words in a claim must be considered in judging the patentability of the claim against the prior art.** *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)." [emphasis added] If these words were not already considered, Applicant should not be penalized with a final rejection.

§103 Rejections

The independent claims 1 and 7 are rejected as unpatentable over: 1) Bonsignore (US2004/0069454); 2) Smalley (US2002/0068170); and 3) Saitoh (WO2004/039893=US2006/0052509, English equivalent). Applicant respectfully disagrees.

In each of the rejections, the Examiner contends that the phrase "saturable absorber" in the preamble is merely an intended use, and because it is an intended use with no structural significance, it essentially can be ignored. Perhaps that is the case with the previous style of claim, but that is

not the situation with 'new use for old product'-style claims[1] (method claims).

In support of that position, Applicant sets out a portion from the *learned treatise,* White, J., *Chemical Patent Practice,* Patent Resources Institute, Inc., (1985), pages 59-60:

"(a) New Use of Old Compound

35 USC 100(b) specifically contemplates the claiming of new and unobvious uses as a method or process:

'The term 'process' means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.'

This statute is in harmony with the body of law recognized prior to the enactment of that statute. *In re Ducci* (CCPA 1955) 225 F2d 683, 107 USPQ 88.

An invention based upon the discovery of an unobvious use of an old composition must be claimed in a method or process claim, not product claims. *In re Moreton* (CCPA 1961) 288 F2d 708, 129 USPQ 227; *In re Hack* (CCPA 1957) 245 F2d 246, 115 USPQ 161; *Clinical Products Ltd, v. Brenner, Comr. Pats* (DCDC 1966) 255 FSupp 151, 149 USPQ 475.

35 USC 100(b) abrogated the principle that a new use of an old process or device is not patentable on that ground alone. *Joseph Bancroft & Sons Co. v. Watson, Comr. Pats.* (DCDC 1959) 170 FSupp 78, 120 USPQ 265; *In re Thau* (CCPA 1943) 135 F2d 344, 57 USPQ 324. Not every new use is patentable, like other subject matter, it must meet the other requisites of patentability, *viz.*, novelty and unobviousness. *Sun Chemical Corp. v. Brenner, Comr. Pats.* (DCDC 1967) 267 FSupp 617, 154 USPQ 143; *Grinnell Corp. v. Va. Elec. & Power Co.* (CA4 1968) 401 F2d 451, 159 USPQ 9, and cases cited therein."

Moreover, the MPEP instructs, as mentioned above, that "all words of claim must be considered." MPEP 2143.03. Therefore, since the claims are re-drafted as method claims and the

[1] Applicant is making no admission that the film disclosed herein is 'old' or 'known.' Instead, Applicant has changed the format of the claim to focus more closely on the nature of the invention. Thereby, Applicant advances prosecution of the instant application.

preamble must now be considered, let's see about the art cited against the claims.

Bonsignore is directed to compositions and method for "enhancing the thermal conductivity in heat transfer systems." Abstract. A word search for 'light,' 'transmittance,' and 'transmit' in Bonsignore yielded "No matches found." See attached. Accordingly, Bonsignore fails to set forth a *prima facie* case of obviousness against the claims; since, Bonsignore does not teach all the elements of the claims. Therefore, this rejection must be removed.

Smalley is directed SWNTs (single walled nano tubes) which are useful as, among other things, "electro-optic devices." Abstract. Again, a word search of Smalley indicates that the only use of the word 'light' occurs in Paragraph 24. However, nowhere in that paragraph is there any mention of "controlling transmittance of light as a function of the intensity of the light (saturable absorption function)." Accordingly, Smalley fails to set forth a *prima facie* case of obviousness against the claims; since, Smalley does not teach all the elements of the claims. Therefore, this rejection must be removed.

Saitoh is directed to a carbon nanotube composition. Abstract. A word search of Saitoh indicates that the 'light' appears in two paragraphs, paragraphs 137 and 167. In paragraph 137, light refers to the hue or shade of the color green. In paragraph 167, light is used to describe an end use, such as a "light emitting material." Nowhere in Saitoh is there any mention of "controlling transmittance of light as a function of the intensity of the light (saturable absorption function)." Accordingly, Saitoh fails to set forth a *prima facie* case of obviousness against the claims; since, Saitoh does not teach all the elements of the claims. Therefore, this rejection must be removed.

There is no doubt that each of these references contain the words: 'film,' 'carbon nanotube,' 'nonionic surfactant,' 'polyvinylpyrrolidone,' and 'polyimide.' A good key word search was conducted. However, the mere recitation of the words from the claims in a reference is insufficient to make an obviousness rejection. If that were the case, then any scientific dictionary would obviate all claims. There is still a requirement for a suggestion. And, there is no suggestion to make the combination in the art presented. Accordingly, these rejections must be removed.

Obviousness-type Double Patenting Rejection

The instant claims are rejected based upon the judically created doctrine of obviousness-type double patenting. In this situation, the Examiner has deemed that the conflicitng claims are not identical, but that they are not patentably distinct from one another. This rejection may be removed by the filing of a terminal disclaimer.

The claim amendments, however, dispatch with the need for the terminal disclaimer. Now, the claims are patentably distinct from the claims of Sakakibara's USPN7682590. As mentioned above, the preamble of the method claim must be considered. Sakakibara, like the references discussed above, does not mention the use set out in the instant claims' preamble. Thus, Sakakibara does not set out a case of *prima facie* obviousness, since all elements of the claimed invention are not taught. Therefore, this rejection must be removed.

Conclusion

In view of the above, Applicant respectfully requests an early Notice of Allowance.

Respectfully submitted,

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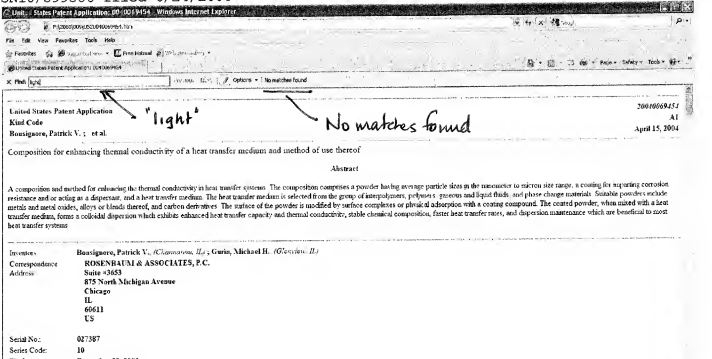

United States Patent Application
Kind Code
Bousignore, Patrick V. ; et al.

20040069451
A1
April 15, 2004

Composition for enhancing thermal conductivity of a heat transfer medium and method of use thereof

Abstract

A composition and method for enhancing the thermal conductivity in heat transfer systems. The composition comprises a powder having average particle sizes in the nanometer to micron size range, a coating for imparting corrosion resistance and/or acting as a dispersant, and a heat transfer medium. The heat transfer medium is selected from the group of interpolymers, polymers, gaseous and liquid fluids, and phase change materials. Suitable powders include metals and metal oxides, alloys or blends thereof, and carbon derivatives. The surface of the powder is modified by surface complexes or physical adsorption with a coating compound. The coated powder, when mixed with a heat transfer medium, forms a colloidal dispersion which exhibits enhanced heat transfer capacity and thermal conductivity, stable chemical composition, faster heat transfer rates, and dispersion maintenance which are beneficial to most heat transfer systems.

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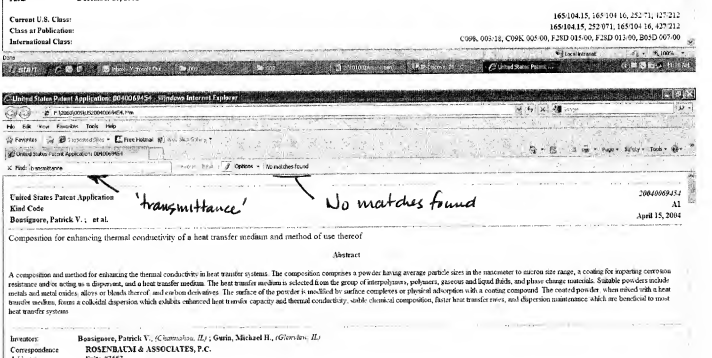

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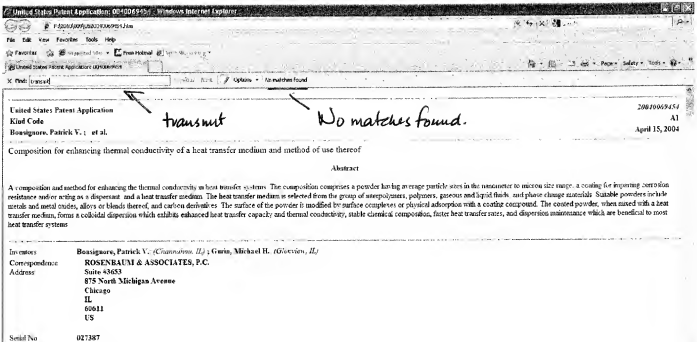
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